IFW



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Steffen GOLETZ et al.

Serial No.: 10/540,479

Group Art Unit: 1645

Filed: June 28, 2005

Examiner: Unknown

For: RECOGNITION MOLECULES FOR THE TREATMENT AND DETECTION OF

TUMOURS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

Timing and Fees

| \boxtimes | Under 37 C.F.R. § 1.97(b), no fee or statement is required for filing this informati disclosure statement is filed: | | | |
|-------------|---|---|--|--|
| | | within three months of the filing date of a national application other than a CPA under § 1.53(d); | | |
| | | within three months of the actual filing date of the national phase of a PCT application; OR | | |
| | \boxtimes | before the mailing of a first substantive office action (including after filing of an RCE). | | |
| | | 37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods fied in 37 C.F.R. § 1.97(b), but before the mailing date of: | | |
| | | a final rejection under 37 C.F.R. 1.113; termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); OR a notice of allowance under 37 C.F.R. § 1.311; and | | |

| | | is acce | ompanied by: |
|--------|-------------|-----------|--|
| | | | the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR |
| | | | a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p). |
| | | | R. § 1.97(d), this information disclosure statement is filed after the mailing llowing actions which have not been withdrawn: |
| | | a final | action under 37 C.F.R. § 1.113; |
| | | termir | nation of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); |
| | | OR a | notice of allowance under 37 C.F.R. § 1.311; |
| | AND | is filed | on or before payment of the issue fee; AND is accompanied by: |
| | | | tement as specified in 37 C.F.R. § 1.97(e) as set forth below, and the fee of 00 under 37 C.F.R. § 1.17(p). |
| Staten | nents U | nder 37 | C.F.R. 1.97(e) |
| | | | Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or |
| | | | No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned attorney after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing date of the information disclosure statement. |
| Cited | Materia | <u>ls</u> | |
| | | ancest | or application Serial No, on Form 892 by the Examiner and/or Form by the applicant; see 37 C.F.R. § 1.98(d). |
| | | _ | s of materials listed but not attached were cited in an international search dated |
| | \boxtimes | Not re | quired by 37 CFR § 1.98. |
| | \boxtimes | Copies | s of the materials listed are attached (except for the foregoing). |

| Non-Englis | h Language References |
|-------------|--|
| | An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s). |
| | A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below: |
| | X = document of particular relevance when it is taken alone Y = document of particular relevance when it is combined with another such document |
| | A = document defining the general state of the art |
| | O = non-written disclosure P = intercalated document |
| | T = document cited to understand the theory or principle underlying the invention |
| | E = patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date |
| | D = cited in the application |
| | L = cited for another reason |
| | & = publication of member of same patent family |
| | Translation of other relevant information on foreign search report |
| Other Infor | mation_ |
| Pavment of | Fees Due (If Any): |
| | neck for \$ covering the fee identified above is attached. |
| Plea | ase charge to Deposit Account No. 13-3402 \$ for the fee identified above. |

The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,

Anthony J. Zelano, Reg. No. 27,969 Attorney/Agent for Applicants

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
Arlington Courthouse Plaza 1
2200 Clarendon Blvd. Suite 1400
Arlington, Virginia 22201
Telephone: (703) 243-6333
Facsimile: (703) 243-6410

Attorney Docket No.: GULDE-0063

Date: September 20, 2006

AJZ:rak

K:\GULDE\63\Information Disclosure Statement(9.20.06).doc

Please type a plus sign (+) inside this box

of

3

Sheet

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

GULDE-0063

Under the Paperwork Reduction Act of 1995, no personal activities a valid OMB control number.

Attorney Docket Number

Substitute for form 1449A/PTO

Application Number 10/540,479

INFORMATION DISCLOSURE Filing Date June 23, 2005

STATEMENT BY APPLICANT First Named Inventor Steffen GOLETZ et al.

Group Art Unit 1645

(use as many sheets as necessary)

Examiner Name Unknown

| | U.S. PATENT DOCUMENTS | | | | | | | |
|------------------------|-----------------------|--|--|---|------------|--|--|--|
| Examiner Initials * | Cite No.1 | U.S. Patent Document Kind Code ² Name of Patentee or Applicant of Cited Document Number (if known) Number | | Date of Publication of Cited Document MM-DD-YYYY | | | | |
| | A1 | 5506343 | | DANA-FARBER CANCER | 04-09-1996 | | | |
| | A2 | 5683674 | | IMPERIAL CANCER INSTIT. | 11-04-1997 | | | |
| | A3 | 5804187 | | CANCER RESEARCH FUND | 09-08-1998 | | | |
| | A4 | 6315997 | | CANCER RESEARCH FUND | 11-13-2001 | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| | FOREIGN PATENT DOCUMENTS | | | | | | | |
|-----------------------|--------------------------|---------------------|-------------------------|--------------------------------------|--|------------------------------|--|-----|
| | Foreign Patent Document | | Foreign Patent Document | Date of Publication of | Pages, Columns, Lines, Where Relevant | | | |
| Examiner Initials* | Cite No.1 | Office ³ | Number ⁴ | Kind Code ⁵ (if known) | Name of Patentee or Applicant of Cited Document | Cited Document MM-DD-YYYY | Passages or Relevant Figures Appear | T⁵ |
| | B1 | wo | 93/20841 | | DANA-FARBER | 10-28-1993 | | N/A |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Examiner Signature | Date Considered | |
|-----------------------|--------------------|--|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. Number refers to English language corresponding family member.

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO Complete if Known Application Number 10/540,479 INFORMATION DISCLOSURE June 23, 2005 Filing Date STATEMENT BY APPLICANT First Named Inventor Steffen GOLETZ et al. Group Art Unit 1645 (use as many sheets as necessary) **Examiner Name** Unknown Attorney Docket Number **GULDE-0063** Sheet of

| NON PATENT LITERATURE DOCUMENTS | | | | | |
|---------------------------------|-----------|---|---|--|--|
| Examiner Initials * | Cite No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | Т | | |
| | C1 | BOEL, E. et al., "Functional human monoclonal antibodies of all isotypes constructed from phage display library-derived single-chain Fv antibody fragments," Journal of Immunological Methods, 2000, vol. 239, pgs. 153-166. | | | |
| | C2 | BRECHBIEL, M.W. et al., "Synthesis on 1-(p-Isothiocyanatobenzyl) derivatives of DTPA and EDTA: Antibody labeling and tumor-imaging studies," Inorg. Chem., 1986, vol. 25, pgs. 2772-2781. | | | |
| | СЗ | CHOTHIA, C. et al., "The predicated structure of immunoglobulin D1.3 and its comparison with the crystal structure," Science Reports, 15 Aug. 1986, vol. 233, pgs. 755-758. | | | |
| | C4 | CHOTHIA, C. et al., "Conformations of immunoglobulin hypervariable regions," Nature, 21/28 Dec. 1989, vol. 342, pgs. 877-883. | | | |
| | C5 | CHOTHIA, C. et al., "Structural repertoire of the human Vh segments," Journal of Molecular Biology, 1992, vol. 227, pgs. 799-817. | | | |
| | C6 | CHOTHIA, C. et al., "Canonical structures for the hypervariable regions of immunoglobulins," Journal of Molecular Biology, 1987, vol. 196, pgs. 901-917. | | | |
| | C7 | HERRERA, A.M. et al., "Efficiency of erthropoietin's signal peptide for HIVmn-1 gp 120 expression," Biochemical and Biophysical Research Communications, 2000, vol. 273, pgs. 557-559. | | | |
| | С8 | DAI, J. et al., "Effect of desialylation on binding, affinity, and specificity of 56 monoclonal antibodies against MUC1 mucin," Tumor Biology, 1998, vol. 19 supp. 1, pgs. 100-110. | | | |
| | C9 | HINODA, Y. et al., "Circulating tumor-associated antigens detected by monoclonal antibodies against the polypeptide core of mucin: comparison of antigen MUSE11 with CA15-3," Gastroenterologia Japonica, 1992, vol. 27 no. 3, pgs. 390-395. | | | |
| | C10 | JENSEN, K.B. et al., "Functional improvement of antibody fragments using a novel phage coat protein III fusion system," Biochemical and Biophysical Research Communications, 2002, vol. 298, pgs. 566-573. | | | |
| | C11 | KOZAK, R.W. et al., "Nature of the Bifunctional chelating agent used for radioimmunotherapy with Yttrium-90 monoclonal antibodies: Critical factors in determining 'in vivo' survival and organ toxicity," Cancer Research, 15 May 1989, vol. 49, pgs. 2639-2644. | | | |
| Evamina | | Date | _ | | |

| Examiner Signature | Date Considered | |
|-----------------------|--------------------|--|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. Number refers to English language corresponding family member.



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO Complete if Known Application Number 10/540,479 INFORMATION DISCLOSURE Filing Date June 23, 2005 STATEMENT BY APPLICANT First Named Inventor Steffen GOLETZ et al. 1645 Group Art Unit (use as many sheets as necessary) Unknown **Examiner Name GULDE-0063** of Attorney Docket Number Sheet

| NON PATENT LITERATURE DOCUMENTS (continued) | | | | | |
|---|-----------|---|----------------|--|--|
| Examiner Initials * | Cite No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² | | |
| | C12 | LIAO, K. et al., "Design of transgenes for efficient expression of active chimeric proteins on mammalian cells," Biotechnol. Bioeng., 2000, vol. 73, pgs. 313-323. | | | |
| | | MARTIN, A.C.R. et al., "Structural families in loops of homologous proteins: Automatic classification, modeling and application to antibodies," Journal of Moleculat Biology, 1996, vol. 263, pgs. 800-815. | | | |
| - | | NUTTALL, S.D. et al., "Design and expression of soluble CTLA-4 variable domain as a scaffold for the display of functional polypeptides," Proteins: Structure, Function, and Genetics, 1999, vol. 36, pgs. 217-227. | | | |
| | C15 | NYGREN, P. et al., "Scaffolds for engineering novel binding sites in proteins," Cur. Opin. Struc. Biol., 1997, vol. 7, pgs. 463-469/ | | | |
| | | ROOMAN, M.J. et al., "Amino acid sequence templates derived from recurrent turn motifs in proteins: critical evaluation of their predictive power," Protein Engineering, 1989, vol. 3 no. 1, pgs. 23-27. | | | |
| · | C17 | SKERRA, A., "Engineered protein scaffolds for molecular recognition," Journal of Molecular Recognition, 2000, vol. 13, pgs. 167-187. | | | |
| | C18 | STIMMEL, J.B. et al., "Yttrium-90 chelation properties of tetraazatetraacetic acid macrocycles, diethylenetriaminepentaacetic acid analogues, and a novel terpyridine acyclic chelator,"Bioconjugate Chemistry, 1995, vol. 6, pgs. 219-225. | | | |
| - | | TONYE LIBYH, M. et al., "A recombinant human scFv anti-Rh(D) antibody with multiple valences using a C-terminal fragment of C4-binding protein," Blood, 15 Nov. 1997, vol. 90 no. 10, pgs. 3978-3983. | | | |
| | | WU, S. et al., "Conformation of complementarity determining region L1 loop in murine IgG λ light chain extends the repertoire of canonical forms," Journal of Molecular Biology, 1993, vol. 229, pgs. 597-601. | • | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | | |
|-----------|------------|--|
| Examiner | Date | |
| Signature | Considered | |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. 2 Applicant is to place a check mark here if English language Translation is attached.